

# Claims

- [c1] A transponder–reader transaction system configured with a biometric security system, said system comprising:
- a transponder configured to communicate with a reader;
  - a reader configured to communicate with said system;
  - a signature scan sensor configured to detect a proffered signature scan sample, said signature scan sensor configured to communicate with said system; and,
  - a device configured to verify said proffered signature scan sample to facilitate a transaction.
- [c2] The transponder–reader transaction system of claim 1, wherein said sensor is configured to communicate with said system via at least one of a transponder, a reader, and a network.
- [c3] The transponder–reader transaction system of claim 1, wherein said signature scan sensor is configured to facilitate a finite number of scans.
- [c4] The transponder–reader transaction system of claim 1, wherein said signature scan sensor is configured to log at least one of a detected signature scan sample, pro–

cessed signature scan sample and stored signature scan sample.

[c5] The transponder-reader transaction system of claim 1, further including a database configured to store at least one data packet, wherein said data packet includes at least one of proffered and registered signature scan samples, proffered and registered user information, terrorist information, and criminal information.

[c6] The transponder-reader transaction system of claim 5, wherein said database is contained in at least one of the transponder, transponder reader, sensor, remote server, merchant server and transponder-reader system.

[c7] The transponder-reader transaction system of claim 6, wherein said remote database is configured to be operated by an authorized sample receiver.

[c8] The transponder-reader transaction system of claim 1, wherein said signature scan sensor device is configured with at least one of an LCD screen and digitizing tablet.

[c9] The transponder-reader transaction system of claim 1, wherein said signature scan sensor is configured to detect and verify signature scan characteristics including at least one of shape, speed, stroke, stylus pressure and timing information.

- [c10] The transponder–reader transaction system of claim 1, wherein said signature scan sensor device is configured to detect and verify false signature devices and thermal patterns.
- [c11] The transponder–reader transaction system of claim 1, further including a device configured to compare a prof–ferred signature scan sample with a stored signature scan sample.
- [c12] The transponder–reader transaction system of claim 11, wherein said device configured to compare a signature scan sample is at least one of a third–party security ven–dor device and protocol/sequence controller.
- [c13] The transponder–reader transaction system of claim 11, wherein a stored signature scan sample comprises a reg–istered signature scan sample.
- [c14] The transponder–reader transaction system of claim 13, wherein said registered signature scan sample is associ–ated with at least one of: personal information, credit card information, debit card information, savings ac–count information, and loyalty point information.
- [c15] The transponder–reader transaction system of claim 14, wherein different registered signature scan samples are

associated with a different one of: personal information, credit card information, debit card information, savings account information, and loyalty point information.

[c16] The transponder–reader transaction system of claim 14, wherein a signature scan sample is primarily associated with at least one of first user information, wherein said first information comprises personal information, credit card information, debit card information, savings account information, and loyalty point information, and wherein a signature scan sample is secondarily associated with at least one of second user information, wherein said second information comprises personal information, credit card information, debit card information, savings account information, and loyalty point information, where second user information is different than first user information.

[c17] The transponder–reader transaction system of claim 1, wherein said transponder–reader transaction system is configured to begin mutual authentication upon verification of said proffered signature scan sample.

[c18] The transponder–reader transaction system of claim 1, wherein said transponder is configured to deactivate upon rejection of said proffered signature scan sample.

- [c19] The transponder–reader transaction system of claim 1, wherein said sensor is configured to provide a notification upon detection of a sample.
- [c20] The transponder–reader transaction system of claim 1, wherein said device configured to verify is configured to facilitate at least one of access, activation of a device, a financial transaction, and a non–financial transaction.
- [c21] The transponder–reader transaction system of claim 1, wherein said device configured to verify is configured to facilitate the use of at least one secondary security procedure.
- [c22] A method for facilitating biometric security in a transponder–reader transaction system comprising:  
proffering a signature scan to a signature scan sensor  
communicating with said system to initiate verification of a signature scan sample for facilitating authorization of a transaction.
- [c23] The method for of claim 22, further comprising registering at least one signature scan sample with an authorized sample receiver.
- [c24] The method of claim 23, wherein said step of registering further includes at least one of: contacting said authorized sample receiver, proffering a signature scan to said

authorized sample receiver, processing said signature scan to obtain a signature scan sample, associating said signature scan sample with user information, verifying said signature scan sample, and storing said signature scan sample upon verification.

- [c25] The method of claim 22, wherein said step of proffering includes proffering a signature scan to at least one of a LCD screen and digitizing tablet.
- [c26] The method of claim 22, wherein said step of proffering further includes proffering a signature scan to a signature scan sensor communicating with said system to initiate at least one of: storing, comparing, and verifying said signature scan sample.
- [c27] The method of claim 22, wherein said step of proffering a signature scan to a signature scan sensor communicating with said system to initiate verification further includes processing database information, wherein said database information is contained in at least one of a transponder, transponder reader, sensor, remote server, merchant server and transponder-reader system.
- [c28] The method of claim 22, wherein said step of proffering a signature scan to a signature scan sensor communicating with said system to initiate verification further in-

cludes comparing a proffered signature scan sample with a stored signature scan sample.

[c29] The method of claim 28, wherein said step of comparing includes comparing a proffered signature scan sample to a stored signature scan sample by using at least one of a third-party security vendor device and protocol/sequence controller.

[c30] The method of claim 28, wherein said step of comparing includes comparing signature scan characteristics including at least one of shape, speed, stroke, stylus pressure and timing information.

[c31] The method of claim 22, wherein said step of proffering a signature scan to a signature scan sensor communicating with said system further comprises using said signature scan sensor to detect at least one of false signature devices and thermal patterns.

[c32] The method of claim 22, wherein said step of proffering a signature scan to a signature scan sensor communicating with said system to initiate verification further includes at least one of detecting, processing and storing at least one second proffered signature scan sample.

[c33] The method of claim 22 wherein said step of proffering a signature scan to a signature scan sensor communicat-

ing with said system to initiate verification further includes the use of at least one secondary security procedure.

- [c34] A method for facilitating biometric security in a transponder-reader transaction system comprising:  
detecting a proffered signature scan at a sensor communicating with said system to obtain a proffered signature scan sample;  
verifying the proffered signature scan sample; and  
authorizing a transaction to proceed upon verification of the proffered signature scan sample.
- [c35] The method of claim 34, wherein said step of detecting further includes detecting a proffered signature scan at a sensor configured to communicate with said system via at least one of a transponder, reader, and network.
- [c36] The method of claim 34, wherein said step of detecting a proffered signature scan includes detecting a proffered signature scan at one of a LCD screen and digitizing tablet.
- [c37] The method of claim 34, wherein said step of detecting includes at least one of: detecting, storing, and processing a proffered signature scan sample.
- [c38] The method of claim 34, wherein said step of detecting



further includes receiving a finite number of proffered signature scan samples during a transaction.

[c39] The method of claim 34, wherein said step of detecting includes logging each proffered signature scan sample.

[c40] The method of claim 34, wherein said step of detecting further includes at least one of detection, processing and storing at least one second proffered signature scan sample.

[c41] The method of claim 34, wherein said step of detecting further includes using said signature scan sensor to detect at least one of false signature devices and thermal patterns.

[c42] The method of claim 34, wherein said step of verifying includes comparing a proffered signature scan sample with a stored signature scan sample.

[c43] The method of claim 42, wherein said step of comparing a proffered signature scan sample with a stored signature scan sample comprises storing, processing and comparing at least one signature scan characteristic including shape, speed, stroke, stylus pressure and timing information.

[c44] The method of claim 42, wherein comparing a proffered

signature scan sample with a stored signature scan sample includes comparing a proffered signature scan sample with at least one of a biometric sample of a criminal, a terrorist, and a transponder user.

[c45] The method of claim 34, wherein said step of verifying includes verifying a proffered signature scan sample using information contained on at least one of a local database, a remote database, and a third-party controlled database.

[c46] The method of claim 34, wherein said step of verifying includes verifying a proffered signature scan sample using one of a protocol/sequence controller and a third-party security vendor.